

distribution of the moisture on a larger area is achieved by means of a capillary-active fabric. The water distributes in the layer formed by the fabric and then dries at the substantially larger surface. The evaporation of the water is moreover supported substantially by the fact that the insulating body is at the same time of diffusion-open design and thus permits the moisture to be carried off.

[0013] The active principle can be explained illustratively by means of a heat bridge in a building corner of an interior insulation. During the winter period, condensation water may occur directly in the heat bridge in the plane between the brickwork and the interior insulation. This condensation water remains naturally in the building corner and takes a long time to dry again since exactly in these corner regions a very small surface is available for discharging the water vapor into the ambient air. With the use of the capillary-active fabric in accordance with the invention in the condensation plane, i.e. in the layer between the wall and the interior insulation, accumulating condensation water is now absorbed and distributed in correspondence with the capillary transporting properties of the fabric. Thus, the area across which the amount of condensation water may dry toward the inner face is increased. This increase of the drying face thus results in substantially quicker drying and hence in a long-term higher damage freedom of the building construction.

[0014] The accelerated drying process may, however, also be used equally if, due to damages to a sarking membrane of a steep roof, a facade or the like, rain water, melt water, etc. penetrates into the building construction. Here, too, the capillary-active design of the fabric causes an immediate distribution of the moisture to a larger area and allows for quick drying thereof.

[0015] Moreover, this can be done with a particularly low constructional effort. The arrangement and/or application of fabrics on an insulating body is possible with approved means in production-technical respect. It is not necessary to penetrate the insulating body with a capillary-active element. In accordance with the invention the fabric is merely disposed on a large surface of the insulating body.

[0016] By means of the heat insulating element in accordance with the invention it is thus possible to achieve in a very simple and quick manner a suitable building construction for avoiding moisture damage. Moreover, the capillary-active fabric protects the building construction in a reliable manner in the long term.

[0017] Apart from the low effort for providing the heat insulating element in accordance with the invention, such construction of a building can be implemented in a particularly cost-efficient and time-saving manner. At the same time, this does not require any additional processing steps or measures that would be unusual for the operator.

[0018] From practice, insulating elements with a fabric lamination have indeed become known, which are, for instance, used for interior insulation. The fabric lamination, however, is available always toward the side of the interior and serves as a trickle protection for the mineral wool material or the like. Therefore, it cannot contribute to the avoiding of condensation water accumulation and to the elimination thereof.

[0019] Advantageous further developments of the heat insulating element in accordance with the invention are the subject matter of the dependent claims 2 to 6.

[0020] It has turned out to be advantageous if the fabric comprises a capillarity for water with a capillary rise of more than 15 cm. It applies basically that the distribution of the condensation water or the like takes place the more efficiently the larger the capillarity of the fabric is. With a capillary rise of more than 15 cm very good drying results could already be achieved in practical tests. Preferably, the capillary rise for water is more than 20 cm, which results in an even larger and better distribution of the moisture and hence even better evaporation thereof.

[0021] It is per se irrelevant of which material the fabric is made. It merely has to have a structure which admits capillary activity. However, fabrics of glass fibers or plastic fibers have turned out to be particularly suited for the common use at a building. They are of sufficiently diffusion-open, homogeneous, and robust design for the usual purpose of application.

[0022] It is of further advantage if the fabric is laminated on the insulating body. Then, it can be connected reliably with the insulating body with an approved method and need not be handled separately.

[0023] The diffusion openness of the insulating body is of further importance for evaporation. It has turned out to be advantageous if it has a μ value of ≤ 3 . With this water vapor diffusion resistance number the resistance is expressed with which a body counteracts the diffusion of water vapor. The smaller the value, the less resistance is thus offered to the water vapor diffusion, and the better can the moisture be guided off by the insulating body. Preferably, the insulating body has a μ value of ≤ 2 , which corresponds to an even better diffusion openness.

[0024] If the insulating body is made of mineral wool, a material is used which has been very approved in insulation technology. Mineral wool has good insulating values, is flame-retardant, and diffusion-open. Alternatively, natural fibers such as in particular soft wood fibers may also be used for the insulating body, which is, for ecologic reasons, also frequently desired in building construction. These materials are also of diffusion-open design.

[0025] In accordance with a further aspect of the present invention, according to claim 7 a building construction is provided with a separator between an inner side and an outer side of a building, wherein the inner side corresponds to a warm side of the building and the outer side corresponds to a cold side of the building, and with a plurality of heat insulating elements which each comprise an insulating body of diffusion-open design. This building construction is characterized in that a fabric which is of capillary-active design is arranged on a surface of the insulating body, and that the fabric is arranged to face the cold side of the building.

[0026] In the case of a building construction of such design it is thus reliably possible to guide moisture off the construction. Due to the capillary-active fabric a large-face distribution of the moisture is achieved, which promotes the evaporation thereof.

[0027] Due to the fact that the fabric is arranged to face the cold side of the building, it is moreover available at a position at which the accumulation of moisture and/or the entry of moisture is to be expected. Thus, this measure is effective exactly in the region in which the demand is highest.

[0028] In this manner, i.e. by the increased drying potential, it is advantageously possible to avoid moisture damage at the building construction in a very reliable and permanent